

CLAIMS:

1. A method of discovering proximate apparatuses and services in a wireless network comprising at least three base stations (B_j), in which all apparatuses G_i ($i \neq k$) determine the signal strengths $ss(i, j)$ at which they receive signals from the base stations B_j , and the apparatuses to be discovered send these signals to a searching apparatus G_k .

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2. A method as claimed in claim 1, wherein the searching apparatus G_k computes the distances $r(i, j)$ of all apparatuses G_i ($i \neq k$) to be discovered from the signal strengths $ss(i, j)$ and determines the standard deviations $\sigma(i, j)$.

10 3. A method as claimed in claim 1 or 2, wherein the searching apparatus G_k computes lower and upper limits $d_{\min}(k, i)$ and $d_{\max}(k, i)$ for apparatuses G_i ($i \neq k$) to be discovered and utilizes these values so as to determine the absolute extent of the distance of the apparatuses.

15 4. A method as claimed in any one of claims 1 to 3, wherein the wireless network comprises at least four, preferably at least five, particularly preferably at least six and particularly at least seven base stations (B_j).

20 5. A method as claimed in any one of claims 1 to 4, wherein all apparatuses G_i to be discovered form a mean value from the signal strengths $ss(i, j)$ measured within a given period of time and send this mean value to the searching apparatus G_k which utilizes the mean value for computing the distance.

25 6. A method as claimed in claim 5, wherein the period of time is 2 to 60 seconds, preferably 5 to 40 seconds and particularly 8 to 20 seconds.

7. A method as claimed in claim 5 or 6, wherein the repetition frequency at which the apparatuses G_i ($i \neq k$) to be discovered send their, preferably averaged, signal

strengths $ss(i, j)$ to the searching apparatus G_k is 0.1 to 50 Hz, preferably 0.25 to 25 Hz, particularly preferably 0.5 to 20 Hz and particularly 1 to 10 Hz.

8. A method as claimed in any one of claims 1 to 7, wherein, by means of a

5 Discovery Framework, preferably by means of Universal Plug&Play (UPnP), the searching apparatus G_k is capable of accessing the services of the apparatuses G_i ($i \neq k$) to be discovered.

9. A method as claimed in claim 8, wherein the searching apparatus G_k finds, by

10 means of a Universal Plug&Play (UPnP) search among the apparatuses G_i ($i \neq k$) to be discovered, that apparatus which provides the desired service.

10. A method as claimed in claim 8 or 9, wherein, in the case of replies to search

requests, each apparatus G_i ($i \neq k$) to be discovered adds information about the signal

15 strengths $ss(i, j)$ to the base stations B_j with which it is in radio contact.